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| 09/645,613 | 08/25/2000 | Jung Min Song | 24286/81551 | 4585 |
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| SIDLEY AUSTIN LLP 555 CALIFORNIA STREET SUITE 2000 SAN FRANCISCO, CA 94104-1715 | | | EXAMINER KE, PENG | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/645,613

Applicant(s)

SONG ET AL.

Examiner

SIMON KE

Art Unit

2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-49 and 54-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-49 and 54-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to communications: Amendment, filed on 1/22/07.

Claims 30-49, and 54-57 are pending in this application. Claims 30, 34, 38, 42, and 46 are independent claims. In the Amendment, filed on 1/22/07, claims 1-29, and 50-53 are canceled, claims 30, 33, 34, 37, 38, 41, 42, 45, 46, 49, and 54-57 were amended.

Specification

The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

Applicant did not make reference to foreign application 35688/1999 in its specification

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-49, and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada US Patent Application Publication 20070157225 further in view Liou US Patent 6,278,446.

As per claim 30, Harada teaches an apparatus for processing multimedia data, the apparatus comprising:

A memory; (see Harada figure 8, item 64; Data totalizing apparatus is a memory) and
A processor configured to perform operation comprising:

Receiving segment information about an audio-visual program, the segment information identifying a plurality of audio-visual segments in the audio-visual program, (figure 16B, item Information Broadcast; paragraphs 0104-0105) wherein each audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual program and represents a continuous temporal content portion in the audio-visual program; (figure 16c, item display screen; paragraphs 0104-0105)

Generating a data structure describing multimedia data and including the segment information along with segment group information defining first and second segment groups (see figure 4, item 15a; paragraph 0067-0068; content coupon information is a segment information and service additional information is another segment information),

each of the first and second segment group defining a respective set of audio-visual segments selected from the plurality of audio-visual segments identified by the segment information in the multimedia stream, (see Harada, paragraph 0065; The coupon and the service segment information includes in additional information and the content G multimedia stream)

wherein said segment group information specifies a respective group type and a respective duration for each of said first and second segment groups, the respective group types indicating that the first and second segment group represent respective first and second (see Harada figure 4, item 15a; paragraph 0067-0068; Content coupon information is corresponds to coupon, which correlate its duration with the corresponding program paragraph 0104 and Service information is corresponds to service, which its duration is based on timeline schedule 0075) and

wherein the segment group information includes segment order information defining that the segments within the first segment group are ordered relative to each other according to a time sequence and the segments within the second segment group are unordered relative to each other according to the time sequence; (see Harada paragraph 0069, 0083, 0070 and 0064-65; The content coupon information is in one embodiment not order based on time but based on user ID, the service information is order based time sequence) and

Storing the data structure with the segment group information in the memory. (see Harada paragraph 0070, the data structures are stored on a local disk)

However Harada fails to teach a hierarchical data structure and content summaries.

Liou (US 6,278,446) teaches hierarchical data structure and content summaries. (see Liou; col. 3, lines 20-40)

It would have been obvious to an artisan at the time of the invention to include Liou's teaching with Harada in order to allow user to view and manually edit the hierarchical structure to make the hierarchical structure substantially useful and meaning to the user.

As per claim 31, Harada and Liou teach the apparatus of claim 30. Harada further teaches wherein said segment group information includes a level information. (see Harada paragraph 0043, the coupon content has a discount value information which reduces its level each time the coupon is used)

As per claim 32, Harada and Liou teach the apparatus of claim 31. Harada further teaches information defines multiple levels. (see Harada paragraph 0043; the discount level can be reduce multiple times)

As per claim 33, Harada and Liou teach the apparatus of claim 30. Harada further teaches wherein each segment contained in the first and second segment groups is defined by a respective start time and a respective segment duration. (see Harada paragraph 0075, 0069 and 0070; The content coupon information is sometimes integrated into time line along with regular programming, The service information is also keeps the start time/ mark time and the duration of the showing)

As per claim 34, Harada teaches a method for processing multimedia data, the method comprising:

generating segment information about an audio-visual program, the segment information identifying a plurality of audio-visual segments in the audio-visual program, (figure 16B, item Information Broadcast; paragraphs 0104-0105) wherein each audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual segment is defined by a temporal

position in a multimedia stream of the audio-visual program and represents a continuous temporal content portion in the audio-visual program; (figure 16c, item display screen; paragraphs 0104-0105)

generating segment group information for a data structure describing multimedia data; (see Harada paragraph 0067, The coupon information and service information which are generated by the Center) and

transmitting said segment group information to a client, (see Harada paragraph 0067, The coupon information and service information which are generated by the Center are transmitted to the client)

wherein said segment group information:

defines first and second segment groups, (see figure 4, item 15a; paragraph 0067-0068; content coupon information is a segment information and service additional information is another segment information) each of which includes a respective plurality of segments selected from a multimedia stream; (see Harada, paragraph 0065; The coupon and the service segment information includes in additional information and the content G multimedia stream)

specifies a respective group type and a respective duration for each of said first and second segment groups; (see Harada figure 4, item 15a; paragraph 0067-0068; Content coupon information is corresponds to coupon, which correlate its duration with the corresponding program paragraph 0104 and Service information is corresponds to service, which its duration is based on timeline schedule 0075) and

includes segment order information defining that the segments within the first segment group are ordered relative to each other according to a time sequence and the segments within the second segment group are unordered relative to each other according to the time sequence. (see Harada paragraph 0069, 0083, 0070 and 0064-65; The content coupon information is in one embodiment not order based on time but based on user ID, the service information is order based time sequence)

However Harada fails to teach a hierarchical data structure and content summaries.

Liou (US 6,278,446) teaches hierarchical data structure and content summaries. (see Liou; col. 3, lines 20-40)

It would have been obvious to an artisan at the time of the invention to include Liou's teaching with Harada in order to allow user to view and manually edit the hierarchical structure to make the hierarchical structure substantially useful and meaning to the user.

As per claim 35, Harada and Liou teach the method of claim 34. Harada further teaches said segment group information includes a level information. (see Harada paragraph 0043, the coupon content has a discount value information which reduces its level each time the coupon is used)

As per claim 36, Harada and Liou teach the method of claim 35. Harada further teaches information defines multiple levels. (see Harada paragraph 0043; the discount level can be

reduce multiple times)

As per claim 37, Harada and Liou teach the method of claim 34. Harada further teaches wherein the segment group information defines a respective start time and a respective segment duration for each segment contained in the first and second segment groups. (see Harada paragraph 0075, 0069 and 0070; The content coupon information is sometimes integrated into time line along with regular programming, The service information is also keeps the start time/mark time and the duration of the showing)

As per claim 38, Harada teaches an apparatus for processing multimedia data, the apparatus comprising:

a memory; (see Harada figure 8, item 64; Data totalizing apparatus is a memory) and
a processor configured to perform operations comprising:

Receiving segment information about an audio-visual program, the segment information identifying a plurality of audio-visual segments in the audio-visual program, (figure 16B, item Information Broadcast; paragraphs 0104-0105) wherein each audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual program and represents a continuous temporal content portion in the audio-visual program; (figure 16c, item display screen; paragraphs 0104-0105)

receiving segment group information defining first and second segment groups in a data structure describing multimedia data, (see figure 4, item 15a; paragraph 0067-0068; content

coupon information is a segment information and service additional information is another segment information),

each of the first and second segment groups including a respective plurality of segments selected from a multimedia stream, (see Harada, paragraph 0065; The coupon and the service segment information includes in additional information and the content G multimedia stream)

wherein said segment group information specifies a respective group type and a respective duration for each of said first and second segment groups (see Harada figure 4, item 15a; paragraph 0067-0068; Content coupon information is corresponds to coupon, which correlate its duration with the corresponding program paragraph 0104 and Service information is corresponds to service, which its duration is based on timeline schedule 0075) and

wherein the segment group information includes segment order information defining that the segments within the first segment group are ordered relative to each other according to a time sequence and the segments within the second segment group are unordered relative to each other according to the time sequence; (see Harada paragraph 0069, 0083, 0070 and 0064-65; The content coupon information is in one embodiment not order based on time but based on user ID, the service information is order based time sequence) and

storing the data structure with the segment group information in the memory. (see Harada paragraph 0070, the data structures are stored on a local disk)

However Harada fails to teach a hierarchical data structure and content summaries.

Liou (US 6,278,446) teaches hierarchical data structure and content summaries. (see Liou; col. 3, lines 20-40)

It would have been obvious to an artisan at the time of the invention to include Liou's teaching with Harada in order to allow user to view and manually edit the hierarchical structure to make the hierarchical structure substantially useful and meaning to the user.

As per claims 39-41, they are of the same scope as claims 31-34. Supra.

As per claim 42, Harada and Liou teach a method for processing multimedia data, the method comprising:

Receiving segment information about an audio-visual program, the segment information identifying a plurality of audio-visual segments in the audio-visual program, (figure 16B, item Information Broadcast; paragraphs 0104-0105) wherein each audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual program and represents a continuous temporal content portion in the audio-visual program; (figure 16c, item display screen; paragraphs 0104-0105)

receiving segment group information from a provider; (see Harada paragraph 0067, The coupon information and service information which are generated by the Center) and

storing said received segment group information in a data structure describing multimedia data in a client, wherein said segment group information: (see Harada paragraph 0070, the data structures are stored on a local disk)

defines first and second segment groups, each of which includes a respective plurality of segments selected from a multimedia stream; (see figure 4, item 15a; paragraph 0067-0068;

content coupon information is a segment information and service additional information is another segment information)

specifies a respective group type and a respective duration for each of said first and second segment groups; (see Harada figure 4, item 15a; paragraph 0067-0068; Content coupon information is corresponds to coupon, which correlate its duration with the corresponding program paragraph 0104 and Service information is corresponds to service, which its duration is based on timeline schedule 0075) and

includes segment order information defining that the segments within the first segment group are ordered relative to each other according to a time sequence and the segments within the second segment group are unordered relative to each other according to the time sequence. (see Harada paragraph 0069, 0083, 0070 and 0064-65; The content coupon information is in one embodiment not order based on time but based on user ID, the service information is order based time sequence)

However Harada fails to teach a hierarchical data structure and content summaries.

Liou (US 6,278,446) teaches hierarchical data structure and content summaries. (see Liou; col. 3, lines 20-40)

It would have been obvious to an artisan at the time of the invention to include Liou's teaching with Harada in order to allow user to view and manually edit the hierarchical structure to make the hierarchical structure substantially useful and meaning to the user.

As per claims 43-45, they are of the same scope as claims 31-34. Supra.

As per claim 46, Harada teaches a storage medium storing a data structure describing multimedia data, the data structure configured to be processed by multimedia data processing apparatus, the stored data structure comprising:

segment information about an audio-visual program, the segment information identifying a plurality of audio-visual segments in the audio-visual program, (figure 16B, item Information Broadcast; paragraphs 0104-0105) wherein each audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual segment is defined by a temporal position in a multimedia stream of the audio-visual program and represents a continuous temporal content portion in the audio-visual program; (figure 16c, item display screen; paragraphs 0104-0105)

segment group information defining first and second segment groups, each of which includes a respective plurality of segments selected from a multimedia stream, (see figure 4, item 15a; paragraph 0067-0068; content coupon information is a segment information and service additional information is another segment information)

wherein said segment group information specifies a respective group type and a respective duration for each of said first and second segment groups, (see Harada figure 4, item 15a; paragraph 0067-0068; Content coupon information is corresponds to coupon, which correlate its duration with the corresponding program paragraph 0104 and Service information is corresponds to service, which its duration is based on timeline schedule 0075) and

wherein the segment group information includes segment order information defining that the segments within the first segment group are ordered relative to each other according to a time sequence and the segments within the second segment group are unordered relative to each other according to [[a]] the time sequence. . (see Harada paragraph 0069, 0083, 0070 and 0064-65; The content coupon information is in one embodiment not order based on time but based on user ID, the service information is order based time sequence)

However Harada fails to teach a hierarchical data structure and content summaries.

Liou (US 6,278,446) teaches hierarchical data structure and content summaries. (see Liou; col. 3, lines 20-40)

It would have been obvious to an artisan at the time of the invention to include Liou's teaching with Harada in order to allow user to view and manually edit the hierarchical structure to make the hierarchical structure substantially useful and meaning to the user.

As per claims 47-49, they are of the same scope as claims 31-34. Supra.

As per claim 54, Harada and Liou teach the apparatus of claim 30. Harada further teaches wherein the respective group type for each of the first and second segment groups specifies that the first and second segment groups are related to at least two objects represented in the content of the multimedia stream. (see Harada figure 4, item 15a; paragraph 0067-0068; Coupon segment is related to target audience and Service is related to target client)

As per claim 55, Harada and Liou teach the apparatus of claim 54. Harada further teaches wherein the first segment group includes segments representing time ordered relation changes between the at least two objects. . (see Harada paragraph 0075, 0069 and 0070; The content coupon information is sometimes integrated into time line along with regular programming, The service information is also keeps the start time/ mark time and the duration of the showing)

As per claim 56, Harada and Liou teach the apparatus of claim 30. Harada further teaches wherein the segment group information indicates that the first segment group includes segments that represent highlights from the multimedia stream. (see Harada paragraph 0075, 0069 and 0070; The service information is also keeps the start time/ mark time and the duration of the showing, the mark time includes highlights)

As per claim 57, Harada and Liou teaches the apparatus of claim 54. Harada further teaches wherein the segments within the second segment group include segments representing constant relations between the at least two objects. (see Harada paragraph 0075, 0069 and 0070; Hit target user information is correlated to Id of a service to be discounted)

Response to Argument

Applicant's arguments with respect to claims 30-49, and 54-57 have been considered but are deemed to be moot in view of the new grounds of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2174

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Peng Ke

/S. K./

Examiner, Art Unit 2174

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174